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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,736	09/23/2003	Stanley B. Collins	58725US002	1779
32692	7590	06/02/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			MARCHESCHI, MICHAEL A	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/668,736	<b>Applicant(s)</b> COLLINS ET AL.	
	<b>Examiner</b> Michael A. Marcheschi	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 19-25 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 19-25 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 23 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/30/06, 5/5/06</u> | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1755

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the description:

Reference numerals 345 and 355 as set forth in figure 3.

Reference numerals 820 as set forth in figure 8.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The examiner cannot find support for these numerical values, as defined in the original specification and/or the amended sections of the specification.

The indicated allowability of claims 19-25 in the office action mailed 10/19/05 is withdrawn after further review of the specification and claims for the following reasons. Although the examiner canceled claims 22-25 by an examiners amendment of 4/25/05, since the indicated allowability is withdrawn, so is the examiners amendment, thus the pending claims for this action are 19-25.

Art Unit: 1755

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19-25 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The binder, grinding aid and the abrasive particles, as defined on page 13, lines 15-17 are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Page 13, lines 15-17 states that “An essential step to make the abrasive article (feature) is the preparation of the slurry (mixing step). The slurry made by combining...a binder precursor, a grinding aid and abrasive particles.”

With respect to the abrasive feature claims, in view of the above statement, it is reasonably implied that the final abrasive feature must contain the essential components of “a binder, a grinding aid and abrasive particles”. This is apparent because these components are essential components in the mixing of the slurry and thus the final feature will inherently contain said components, thus said components are essential components of the abrasive feature (essential components not listed in the claims).

With respect to the method of making and abrasive feature claims, in view of the above statement, it is reasonably implied that the method must include a slurry preparation step, wherein the slurry contains, as essential components, a binder precursor, a grinding aid and abrasive particles.” This is apparent because these components are essential components in the mixing of the slurry. In view of this, the slurry preparation step (must be defined in the claims)

Art Unit: 1755

and the essential components used to make the slurry are both essential limitations not listed in the claims.

Claims 22-25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 is indefinite because it claims “a method for making an abrasive **article**”, however, the claim does not make an abrasive article, per se, because an abrasive article includes a backing (or something that the features are applied on). It is suggested that this claim be changed to “A method of making an abrasive **feature**”. Applicants are reminded that the last line of this claim also sets forth “abrasive article” and thus should also be changed to “abrasive **feature**”.

Claim 23 is indefinite because it claims “a method further including applying a backing to the abrasive **article**”, however, a backing is not applied to an abrasive **article** (of claim 22, this claim is not an abrasive article as defined above) because an abrasive **article** implies that a backing (or something that the features are applied on) is already present. It is suggested that this claim be changed to “applying a backing to the abrasive **feature**”

Claim 23 is also indefinite because it does not define when the backing is applied in the process. It is before or after the curing step?

Claim 24, which depends on the claim 23 (“method further including applying a backing to the abrasive **article**) is indefinite because it claims “a method further including removing the **article** from the tool”, however, the (abrasive) **article** (of claim 22, this claim is not an abrasive

Art Unit: 1755

article as defined above) is not removed from the tool because an (abrasive) **article** implies that a backing (or something that the features are applied on) is already present. It is suggested that this claim be changed to “removing the **feature** from the tool”.

Claim 24 is also indefinite because it does not define when the removing step takes place. It is before or after the curing step and/or before or after the application of the backing?

Claim 25 is indefinite because it defines “curing out of the tool”, however, this claim does not define a removing step. It is suggested that either (1) this claim define a removing step or (2) that this claim be dependent on claim 24.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 19-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting (ODP) as being unpatentable over claims 1, 8, 22, 23 and 34 of copending Application No. 10/668,753. Although the conflicting claims are not identical, they are not

Art Unit: 1755

patentably distinct from each other because the reduction to practice of the copending claims would render obvious the instant claims.

With respect to claims 19-25 (parabolic section), claims 1 and 34 of the copending claims defines a method and article, wherein the features are of a parabolic function. Although the copending claims do not literally define four distinct sidewalls, the broad recitation of “faces” (plural) defined by a parabolic function”, according to the copending claims, reads on four faces.

Although, instant claims 19-21 are directed to abrasive features and claims 1 and 8 of the copending claims are directed to an abrasive article (with a backing), no distinction is seen to exist because (1) the instant claims use “comprising” which opens the claims to a backing, thus the article (irrespective of what it is called) will be the same and (2) the subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: abrasive composites (features). Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

With respect to claim 22, the instant claims define a method “comprising” and comprising opens the claims to application of a backing.

With respect to claim 23 the copending claims define applying a backing,

With respect to claims 22, 24 and 25 (filling of tool and curing of features), copending claim 23 defines this. Although claim 23 is not defined with the combination of claims 22 and

Art Unit: 1755

24, it is the examiners position that one skilled in the art would have appreciated how to form abrasive composites on a backing, said method being that of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In as much as applicants presented arguments to this ODP rejection on 4/20/05, it is argued that the copending claims do not disclose four sidewalls. However, such argument is not persuasive because the broad recitation of “faces” (plural) defined by a parabolic function”, according to the copending claims, reads on four faces.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5/06  
MM

Michael A Marcheschi  
Primary Examiner  
Art Unit 1755